

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

FOUR NEW MOLLUSKS FROM THE PHILIPPINE
ISLANDS.

BY PAUL BARTSCH*.

Among several lots of Philippine Islands mollusks sent to the United States National Museum for determination by Mr. Walter F. Webb are four forms that require a name, which is here provided. Mr. Webb, with characteristic generosity, has donated the types of these subspecies to the United States National Museum.

Cochlostyla mirabilis donsallana, new subspecies.

In two shells from Donsal, the color of the first three and a quarter turns is white, from there on it gradually changes to wax yellow, deepening steadily toward the aperture, behind which it is usually pale olive with a rusty suffusion. The spiral brown color bands may be absent or reduced to a mere line at the summit and a narrow zone a little anterior to the middle of the turns, the latter scarcely reaching the last half of the last turn. No dark area surrounds the insertion of the columella nor are there any spiral bands on the base. The shell is far more elevated than is usually the case in forms of *Cochlostyla mirabilis* and the aperture is very large and very oblique, with a strong reflected white peristome. The interior is white.

The type, Cat. No. 219021, U. S. N. M., has 5 whorls, and measures: altitude, 43.6 mm.; greater diameter, 35.6 mm.; lesser diameter, 30 mm. The other specimen is in Mr. Webb's collection.

Helicostyla woodiana paracaleana, new subspecies.

Shell similar to *Helicostyla woodiana reevi* Broderip, but broader and less elevated, with the general ground color tending toward olive. In *Helicostyla woodiana reevi* the ground color is chestnut brown. The aperture is very large and considerably broader and shorter than in

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Helicostyla woodiana reevi. The peristome is also much darker in the present form. The spiral banding in the type would indicate that it is probably as variable in this subspecies as in the other forms that constitute *Helicostyla woodiana*.

The type, Cat. No. 219029, U. S. N. M., comes from Paracale, Ambos Camarines, Luzon. It has 5.5 whorls and measures: height, 75 mm.; greater diameter, 59 mm.; lesser diameter, 46 mm.

***Geophorus agglutinans leytensis*, new subspecies.**

Shell similar to *Geophorus agglutinans agglutinans* Sowerby, but much smaller, with the upper portion of the whorls bright chestnut brown, excepting a narrow yellow zone at the summit and another at the periphery. In *Geophorus agglutinans agglutinans* Sowerby, the upper surface is bright yellow. The base of the present subspecies has a broad brown band covering the anterior third, which is separated from the periphery by a narrow yellow zone; the rest is yellow. In *Geophorus agglutinans agglutinans* the base is inclined to be unicolor, or if a band is present it is merely indicated.

The type and another specimen, Cat. No. 219023, U. S. N. M., come from Jaro, Leyte. The type has 5.5 whorls and measures: altitude, 8.3 mm.; greater diameter, 13 mm.; lesser diameter, 11.3 mm. Four additional specimens are in Mr. Webb's collection. A cotype of *Geophorus agglutinans agglutinans* collected by Cummings at Dingle, Panay, has 5 whorls and measures: altitude, 9.5 mm.; greater diameter, 17.6 mm.; lesser diameter, 14.7 mm.

***Vivipara cebuensis boholensis*, new subspecies.**

Shell similar to *Vivipara cebuensis* but in every way much larger than that form with the umbilicus much wider and much less covered. The obsolete shoulder is more pronounced in the present form, while the fine spiral sculpture is decidedly less developed. There is also a tendency toward obsolete maleations on the last turn.

We have seen two specimens of this subspecies from Bohol, the type, Cat. No. 219002, U. S. N. M., and another specimen in Mr. Walter F. Webb's collection. The type has lost about the first half turn, the 5.5 remaining measure: altitude, 36.5 mm.; greater diameter, 27.5 mm.; lesser diameter, 22.5 mm.